

REMARKS

The Office Action dated November 17, 2005, has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

Claims 7-20 are currently pending in the application, of which claims 7, 11, and 14 are independent claims. All of claims 7-20 are respectfully submitted for consideration.

Rejections under 35 U.S.C. 102(b)

Claims 7-20 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,530,575 of Acampora et al. ("Acampora"). Applicants respectfully traverse this rejection.

Claim 7, upon which claims 8-10 depend, is directed to a planning arrangement for forming a communications network. The arrangement may include a set of at least two modules. Each module of the set may represent a technical solution usable in a layer of the communications network. The arrangement may be configured to allow selection of at least two modules of the set. The arrangement may be configured to arrange said at least two modules of the set on top of each other as a layered structure modeling the communications network to be formed. A given module of the layered structure may be configured to offer resources to an adjacent module above the given module and/or to use resources of an adjacent module below the given module.

Claim 11, upon which claims 12-13 depend, is directed to a planning method for forming a communications network. The method may include forming a set of at least two modules. Each module of the set may represent a technical solution usable in a layer of the communications network. The method may also include selecting at least two modules of the set. The method may further include arranging said at least two modules of the set on top of each other as a layered structure for modeling the communications network to be formed. A given module of the layered structure may be configured to offer resources to an adjacent module above the given module and/or to use resources of an adjacent module below the given module.

Claim 14, upon which claims 15-20 depend, is directed to a planning module for forming a communications network. The module may be a part of a set of at least two modules. The module may represent a particular technical solution usable in the communications network. The module may be arranged on top of and/or below another module to form a layered structure for modeling the communications network to be formed. The module may be configured to offer resources to an adjacent module above the given module and/or to use resources of an adjacent module below the given module.

The claims relate to network planning (“A planning arrangement for forming a communications network” [Claim 7], “A planning method for forming a communications network [Claim 11], and “A planning module for forming a communications network” [Claim 14]). In order to put the concept of network planning in context, a discussion of the present disclosure is provided, with contrast to Acampora.

As explained in the background of the invention on page 1 of the application, forming a communication network can be a very complex task. Many different arrangements and configurations are possible at different stages of development of the network, and tools are therefore required in order to model the network for planning purposes.

Accordingly, the present disclosure provides the ability to model the network in a particular way at the planning stage, in order to simplify its complexity and to allow decisions to be taken in relation to its development. As disclosed, the planning process can include forming modules, each of which represents a technical solution which is potentially usable in a layer of the communications network. This is described at p. 2, l. 27 – p. 3, l. 8 of the present specification.

The use of modules representing particular technical solutions allows the planning process to be simplified by enabling the viewing and studying of potential arrangements if a particular technical solution is adopted. This ability to view and study aids the planning process because it allows the planner to see how a particular technical solution will operate compared to alternative technical solutions in the final network.

The paragraph bridging pages 6 and 7 of the present specification additionally describes how the process of splitting the planning procedure into modules can simplify a very complex task and allow the user to concentrate his focus on a single layer at a time. The same paragraph also mentions how different technical solutions can be compared with each other.

The same concept is described in more detail on page 3, lines 16-21 of the present specification. For instance, there the specification describes how lower level modules can be changed when comparing different solutions. Thus, it is possible to calculate how a particular network would perform with for example, SDH over fiber and with WDM implementation, and to compare the costs of each solution. The goal of such a process is to select the most preferable solution for implementation in the network.

Similarly, page 5, lines 24-36 and page 6, lines 1-5 of the present specification further describe how the disclosed method allows the user to select particular desired modules. Thus, as described at page 6, the user can study different technical solutions in order to decide which is most beneficial. The examples given in this passage are that IP traffic can be routed either directly to WDM or to SDH layers or that ATM links can be routed in the two MBIT/s layer or in the STM 1 layer. This process involves forming modules corresponding to each potential technical solution, (i.e. two particular types of layer) and comparing the results.

Likewise, page 6, lines 17-26 of the present specification provides further examples of how embodiments of the disclosed planning method may be used to select between particular modules representing alternative technical solutions. For example, third generation logical traffic may be carried in ATM virtual circuits, which are modeled by an ATM virtual circuit module. Alternatively, the third generation logical traffic may be modeled as being carried in IP packet streams created in an IP module.

Other aspects of the modeling process can be carried out in further modules representing layers at a different level in the arrangement. Thus the disclosed method allows the modeling of alternative technical solutions and the selection of the most appropriate arrangement provided by the results of this modeling.

With this understanding of the disclosure, the contrast with Acampora becomes apparent. Further, as will be discussed below, Acampora fails to disclose or suggest all of the elements of the claims and, therefore, fails to provide the features and advantages discussed above.

Acampora is directed to a method for arranging a telecommunications network. Col. 9, line 44 et seq. and Figure 10 of Acampora provide a particular representation of the infrastructure of such a network. The infrastructure is represented by a layer diagram with each layer providing a service to the one above. Thus the lowest layer is the physical deployment of the medium, the next layer corresponds to the fiber interconnection graph, the next layer shows the optical connectivity graph and so on. This layered structure is discussed in the “related art” section of Acampora as a representation of a broadband telecommunications infrastructure which is being considered for implementation, as clarified at col. 9, lines 27-30 of Acampora. In other words, the layered structure discussed in this passage of Acampora is a plan or a model for a telecommunications network.

One difference between embodiments of the planning method of the present invention and the disclosure of Acampora is that Acampora does not disclose forming a

set of modules, each module representing a technical solution usable in a layer of communications network and selecting modules from the set.

Claim 7 recites “the arrangement comprising a set of at least two modules, each module of the set representing a technical solution usable in a layer of the communications network,” claim 11 recites “forming a set of at least two modules, each module of the set representing a technical solution usable in a layer of the communications network,” and claim 14 recites “the module is a part of a set of at least two modules, the module represents a particular technical solution usable in the communications network.” Acampora does not disclose or suggest at least these features, as illustrated above.

One significance of this difference is that as claimed there are a set of planning modules which can provide models of feasibility of alternative technical solutions usable in the network, which modules can in turn be used to identify the best solution for implementation. In contrast, the proposed infrastructure shown in cols. 9 and 10 of Acampora is disclosed merely in the context of a single, static model of the arrangement of a particular network. Acampora neither discloses nor suggests using such a representation to study alternative technical solutions in the form of a set of modules and then selecting the best modules based on this study. Thus the representation of Acampora is not used to compare alternative solutions and ultimately to select a particular configuration for implementation. Accordingly, the representation of

Acampora does not show modules representing potential technical solutions, but rather a static representation of a network infrastructure.


Additionally, even assuming that Acampora disclosed network modules (not admitted), and construing those as the Office Action does (namely as layers of Figure 10), Acampora still does not teach “arrange said at least two modules of the set on top of each other as a layered structure for modeling the communications network to be formed” (claim 7) or “arranging said at least two modules of the set on top of each other as a layered structure for modeling the communications network to be formed” (claim 11), after two or more modules have been selected. Rather, as noted above, Acampora discloses a static network model, and does not disclose anything about arranging modules after selecting two or more of them. Accordingly, Acampora also does not disclose or suggest these features of the claims.

Claims 8-10, 12-13, and 15-20 depend respectively from claims 7, 11, and 14 and recite additional features. Accordingly, it is respectfully submitted that Acampora does not disclose or suggest all of the features of any of claims 8-10, 12-13, and 15-20.

For the reasons given above, it is respectfully submitted that each of claims 7-20 recites subject matter that is neither disclosed nor suggested in Acampora. It is therefore respectfully requested that all of claims 7-20 be allowed, and that this application be passed to issue.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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